

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) Use of A method for inhibiting the expression of a target transcript comprising contacting a target transcript with a single-stranded RNA molecule having a length from 14-50 nucleotides wherein at least the 14-20 5' most nucleotides are substantially complementary to a said target transcript for the manufacture an agent for inhibiting the expression of said target transcript.

2. (Currently amended) The use method of claim 1 wherein said expression is inhibited by RNA-interference.

3. (Currently Amended) The use method of claim 1 wherein said RNA molecule has a length from 15-29 nucleotides.

4. (Currently Amended) The use method of claim 1, wherein said RNA molecule has a free 5'hydroxyl moiety or a moiety selected from phosphate groups or analogues thereof.

5. (Currently Amended) The use method of claim 1, wherein said RNA molecule has 5'-moiety selected from the group consisting of 5'-monophosphate

((HO)₂(O)P-O-5'), 5'-diphosphate ((HO)₂(O)P-O-P(HO)(O)-O-5'), 5' triphosphate
((HO)₂(O)P-O-(HO)(O)P-O-P(HO)(O)-O-5'), 5' guanosine cap (7-methylated or non-
methylated) (7m-G-O-5'-(HO)(O)P-O-(HO)(O)P-O-P(HO)(O)-O-5'), 5' adenosine cap
(Appp), and any modified or unmodified nucleotide cap structure (N-O-5'(HO)(O)P-
O-(HO)(O)P-O-P(HO)(O)-O-5'), 5'-monothiophosphate (phosphorothioate;
(HO)₂(S)P-O-5'), 5'-monothiophosphate (phosphorothioate; (HO)(HS)(S)P-O-5'),
5' phosphorothiolate ((HO)₂(O)P-S-5'); any additional combination of oxygen/sulfur
replaced monophosphate, diphosphate and triphosphates (e.g. 5'-alpha-
~~thiotriphosphate, 5'-gamma-thiotriphosphate, etc.~~), 5'-phosphoramidates
((HO)₂(O)P-NH-5', (HO)(NH₂)(O)P-O-5'), 5' alkylphosphonates (R=alkyl=methyl,
ethyl, isopropyl, propyl, etc., e.g. RP(OH)(O)-O-5', (OH)₂(O)P-5'-CH₂-), and
5' alkyletherphosphonates (R=alkylether=methoxymethyl (MeOCH₂), ethoxymethyl,
etc., e.g. RP(OH)(O)-O-5').

6. (Currently Amended) The ~~use~~ method of claim 1, wherein said RNA
molecule is completely complementary to said target transcript ~~optionally with~~
~~exception of nucleotides that extend beyond position 20 (counted from the~~
~~5' terminus).~~

7. (Currently Amended) The ~~use~~ method of claim 1, wherein said RNA
molecule comprises at least one modified nucleotide analogue.

8. (Currently amended) The use method of claim 7, wherein the modified nucleotide analogues are selected from sugar-backbone- and nucleobase-modified ribonucleotides and combinations thereof.
9. (Currently Amended) The use method of claim 1 for the inhibition of target gene expression in vitro.
10. (Currently Amended) The use method of claim 1 for the inhibition of target gene expression in vivo.
11. (Currently Amended) The use method of claim 1, wherein said RNA molecule is formulated as a pharmaceutical composition which contains a pharmaceutically acceptable carrier.
12. (Currently amended) The use method of claim 11, wherein said carrier is selected from cationic liposomes and cationic lipid formulations.
13. (Currently Amended) The use method of claim 1, wherein said RNA molecule is associated with biodegradable polymers or microparticles.
14. (Currently amended) The use method of claim 13, wherein said association comprises a covalent coupling.

15. (Currently amended) The use method of claim 14, wherein said covalent coupling occurs via the 3'-terminus of the RNA molecule.

16. (Currently Amended) The use method of claim 10 for diagnostic applications.

17. (Currently Amended) The use method of claim 10 for therapeutic applications.

18. (Currently amended) The use method of claim 17 for the prevention or treatment of disease associated with overexpression of at least one target transcript.

19. (Currently amended) The use method of claim 18, wherein the diseases are selected from the group consisting of tumor diseases, inflammatory diseases, and infectious diseases, e.g. viral infections, degenerative diseases and autoimmune diseases.

20. (Original) A pharmaceutical composition for inhibiting the expression of a target transcript by RNAi comprising an active agent a single-stranded RNA molecule having a length from 14-50 nucleotides, wherein at least the 14-20 5' most nucleotides are substantially complementary to said target transcript.

21. (Original) A method for the prevention or treatment of disease associated with overexpression of at least one target gene comprising administering a subject in need thereof a single-stranded RNA molecule having a length from 14-50 nucleotides, wherein at least the 14-20 5' most nucleotides are substantially complementary to a transcript of said target gene in an amount which is therapeutically effective RNAi.
22. (Withdrawn) Purified human RISC having a molecular weight of from up to about 150-160 kDa.
23. (Withdrawn) The RISC of claim 22 comprising at least one member of the Argonaute family of proteins.
24. (Withdrawn) The RISC of claim 22 containing eIF2C1 and/or eIFC2 and optionally at least one eIFC3, eIFC4, HILI and HIWI.
25. (Withdrawn) The RISC of claim 22, further containing an RNA component.
26. (Withdrawn) A host cell or non-human host organism capable of overexpressing RISC.

27. (Withdrawn) A method of enhancing RNAi in a cell or an organism comprising causing said cell or organism to overexpress at least one component of RISC.
28. (Withdrawn) The method of claim 27 for screening applications.
29. (Withdrawn) The method of claim 27 for therapeutic applications.
30. (Withdrawn) An antisense siRNA precursor molecule in the form of a hairpin stem-loop structure comprising 19 to 29 base pairs in stem, wherein at least 14 nucleotides in the stem are substantially complementary to a target transcript.
31. (Withdrawn) The siRNA precursor molecule of claim 30 having a 3' overhanging end.
32. (New) The method of claim 5, wherein said oxygen/sulfur replaced triphosphate is 5'-alpha-thiotriphosphate or 5'-gamma-thiotriphosphate.
33. (New) The method of claim 5, wherein said 5'-phosphoramidate is $(HO)_2(O)P-NH-5'$ or $(HO)(NH_2)(O)P-O-5'$.
34. (New) The method of claim 5, wherein said 5'alkylphosphonate is $RP(OH)(O)-O-5'$ - or $(OH)_2(O)P-5'-CH_2-$.

35. (New) The method of claim 5, wherein said 5'alkyletherphosphonate has an alkyl ether selected from the group consisting of methoxymethyl (MeOCH_2-) and ethoxymethyl ($\text{RP(OH)(O)-O-5}'$).

36. (New) The method according to claim 35, wherein said 5'alkyletherphosphonate is $\text{RP(OH)(O)-O-5}'$, wherein R=alkylether.

37. (New) The method according to claim 19, wherein said diseases are selected from the group consisting of viral infections, degenerative diseases and autoimmune diseases.

38. (New) The method of claim 1, wherein the single stranded RNA molecule is longer than 20 nucleotides and the 20 5' most nucleotides are substantially complementary to a target transcript